

**AUTOMATED FILAMENT ATTACHMENT SYSTEM FOR VACUUM
FLUORESCENT DISPLAY**

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ABSTRACT OF THE DISCLOSURE

10 A filament attachment system includes a bond head
comprising a de-spooling system with a spool and balanced
dancer arm assembly, a clamp having a curved filament
entry, a narrower gripping region, and a wider filament
exit, and a bond tool comprising a guide portion, a
15 grooving portion, and a staking portion. The grooving
portion forms a groove into a bond and the staking
portion closes the groove over the filament, securing the
filament in the bond. Thus, the filament can be attached
with a single pass of the bond head using a single bond.